1. Record Nr. UNINA9910783217403321

Autore	Lau Kung-Kiu
Titolo	Component-based software development [[electronic resource]] : case studies / / Kung-Kiu Lau
Pubbl/distr/stampa	River Edge, N.J., : World Scientific, c2004
ISBN	1-281-34763-9 9786611347635 981-256-242-7
Descrizione fisica	1 online resource (312 p.)
Collana	Series on component-based software development ; ; v. 1
Altri autori (Persone)	LauK.-K <1953-> (Kung-Kiu)
Disciplina	005.3
Soggetti	Computer software - Development Computer software industry
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Component-Based Software Development: Case Studies; Contents; Preface; 1. A Survey of Proposals for Architecting Component Software; 1.1 Introduction; 1.2 COTS Software Components; 1.2.1 Component Models; 1.2.2 COTS Components and the Software Development Process; 1.2.3 The Maturity of COTS Products and COTS-based Systems; 1.2.4 COTS Components in Real-time and Embedded systems; 1.2.5 Risks and Benefits of COTS Components; 1.3 Components and Software Architecture; 1.3.1 Integration of Software Components; 1.3.2 Software Components and Product line Architecture 1.4 COTS Components and Software Architecture1.4.1 COTS Components and Product line Architecture; 1.4.2 MOTS Frameworks and COTS Components; 1.4.3 Desirable Properties for Component Software Architecture; 1.4.4 Patterns for the Architecture of COTS-intensive Systems; 1.4.4.1 Middleware Layers; 1.4.5 COTS Component Integration; 1.4.6 Architectural Mismatch; 1.4.7 Maintainability of Component Software Architecture; 1.4.8 Architectural Views and COTS Components; 1.4.9 UML-RT and COTS Component Integration; 1.4.10 COTS Components in the Layers Associated with the Infrastructure Module 1.5 Discussion and ConclusionsReferences; 2. Describing Specifications and Architectural Requirements of COTS Components; 2.1 Introduction;

2.2 Definition of Commercial Components; 2.2.1 Component Interfaces; 2.2.2 Semantic and Protocol Levels; 2.2.3 Interface Notation; 2.2.4 COTS Documents; 2.3 A COTS-based Application Example; 2.4 Software Architecture; 2.5 UML Real-Time; 2.6 Composing the Software Architecture; 2.6.1 The GTS Software Architecture; 2.6.2 Mapping the UML-RT GTS Example to UML Standard; 2.6.3 Including Information into Capsules
2.7 Integrating the Architecture into other CBD Methodologies2.8 Concluding Remarks; References; 3. Definition of COTS Software Component Acquisition Process - The Case of a Telecommunication Company; 3.1 Introduction; 3.2 Overview of the Case; 3.3 Towards the CSCA Process - Analysis of Existing Models; 3.3.1 Overview of the Reference Models; 3.3.2 Acquisition Process Framework based on the Existing Models; 1. Planning; 2. Contracting; 3. Delivery and Use of the Component; 3.4 Requirements for the CSCA Process - the Purchaser's Perspective; 3.4.1 Main concerns Revealed by the Interviews Contracting and negotiationEvaluation of components and suppliers; Management of components and supplier relationships; 3.5 Illustration of the Defined CSCA Process Framework; 3.6 Evaluation of the Process Model - The Server Project; 3.6.1 Feedback from the Evaluation; 3.6.2 Conclusions - General Implications; References; 4. The Library Systems Product Line: A Case Study Demonstrating the KobrA Method; 4.1 Introduction; 4.2 KobrA Components; 4.2.1 Modeling Dimensions; 4.2.2 Containment; 4.2.2.1 Component Specification versus Realization; 4.2.2.2 Containment Trees; 4.2.3 Genericity
4.2.3.1 Generic Components